

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An image display method comprising the steps of:

performing interimage processing on two original images, constituting each of two or more pairs of original images administering subtraction processes on each of at least two types of pairs of images, selected from three or more original images taken of the same subject; and

displaying at least two subtraction images, which are generated by the subtraction processes and, which become objects of comparison and reading; and, wherein

the subtraction processes are performed by causing the positions of pixels that correspond to structures within the images to be processed to match; and

arranging, or switching in sequence, and displaying two or more interimage-processed images generated by said interimage processing the display is performed such that the display positions of corresponding structures within each subtraction image are matched in at least one of the horizontal or vertical directions.

2. (currently amended): The image display method as set forth in claim 1, wherein

said two or more ~~interimage-processed~~subtraction images are arranged in a manner in which

display positions of structurally characteristic parts of said subject in said two or more

~~interimage-processed~~subtraction images are aligned.

3. (currently amended): The image display method as set forth in claim 1, wherein said two or more ~~interimage-processed~~subtraction images are switched in sequence in a manner in which display positions of structurally characteristic parts of said subject in said two or more ~~interimage-processed~~subtraction images are registered.

4. (original): The image display method as set forth in claim 1, wherein said three or more original images are taken in sequence in a time series manner.

5. (original): The image display method as set forth in claim 2, wherein said three or more original images are taken in sequence in a time series manner.

6. (original): The image display method as set forth in claim 3, wherein said three or more original images are taken in sequence in a time series manner.

7. (currently amended): The image display method as set forth in claim 1, wherein one of said two original images is selected as a reference image so that each of said ~~interimage-processed~~subtraction images is generated based on said image.

8. (currently amended): The image display method as set forth in claim 2, wherein one of said two original images is selected as a reference image so that each of said ~~interimage-processed~~subtraction images is generated based on said image.

9. (currently amended): The image display method as set forth in claim 3, wherein one of said two original images is selected as a reference image so that each of said ~~interimage-processed~~ subtraction images is generated based on said image.

10. (currently amended): The image display method as set forth in claim 4, wherein one of said two original images is selected as a reference image so that each of said ~~interimage-processed~~ subtraction images is generated based on said image.

11. (original): The image display method as set forth in claim 7, wherein said three or more original images are acquired in sequence in a time series manner, and said reference image is the newest or oldest in a time series.

12. (currently amended): The image display method as set forth in claim 4, wherein each of said ~~interimage-processed~~ subtraction images is generated by performing said interimage ~~processing~~ subtraction processes on two of said three or more original images which are adjacent in a time series.

13. (currently amended): The image display method as set forth in claim 1, wherein said ~~interimage-processing~~ subtraction processes comprise the process of performing subtraction between corresponding pixels in said two original images.

14. (currently amended): The image display method as set forth in claim 2, wherein
said ~~interimage processing is~~subtraction processes comprise the process of performing
subtraction between corresponding pixels in said two original images.

15. (currently amended): The image display method as set forth in claim 3, wherein
said ~~interimage processing is~~subtraction processes comprise the process of performing
subtraction between corresponding pixels in said two original images.

16. (currently amended): The image display method as set forth in claim 1, wherein
said ~~interimage processing is~~subtraction processes comprise the process of registering positions
of structural elements of said two original images.

17. (currently amended): The image display method as set forth in claim 2, wherein
said ~~interimage processing is~~subtraction processes comprise the process of registering positions
of structural elements of said two original images.

18. (currently amended): The image display method as set forth in claim 3, wherein
said ~~interimage processing is~~subtraction processes comprise the process of registering positions
of structural elements of said two original images.

19. (currently amended): The image display method as set forth in claim 1, wherein,
in said ~~interimage processing~~subtraction processes the process of registering positions of

structural elements of said two original images is first performed, and then the process of performing subtraction between corresponding pixels in said two original images is performed.

20. (currently amended): The image display method as set forth in claim 2, wherein, in said ~~interimage-processing~~subtraction processes the process of registering positions of structural elements of said two original images is first performed, and then the process of performing subtraction between corresponding pixels in said two original images is performed.

21. (currently amended): The image display method as set forth in claim 3, wherein, in said ~~interimage-processing~~subtraction processes the process of registering positions of structural elements of said two original images is first performed, and then the process of performing subtraction between corresponding pixels in said two original images is performed.

22. (currently amended): The image display method as set forth in claim 1, wherein said two or more ~~interimage-processed~~subtraction images are arranged, or switched in sequence, and displayed, in the order that said original images on which said ~~interimage-processed~~subtraction images are based were taken.

23. (original): The image display method as set forth in claim 1, wherein said three or more images are medical radiation images.

24. (currently amended): The image display method as set forth in claim 2, wherein each of said ~~interimage-processed~~subtraction images is generated by performing said ~~interimage processing-subtraction processes~~ on two of said three or more original images which are adjacent in a time series.

25. (currently amended): The image display method as set forth in claim 3, wherein each of said ~~interimage-processed~~subtraction images is generated by performing said ~~interimage processing-subtraction processes~~ on two of said three or more original images which are adjacent in a time series.

26. (currently amended): An image display unit comprising:
image display means;
interimage processing means for performing interimage processing on two original images to generate interimage-processed images, said interimage processing comprising at least one of the process of performing subtraction between corresponding pixels in said two original images, the process of registering positions of structural elements of said two original images, and the process of registering positions of structural elements of said two original images followed by the process of performing subtraction between corresponding pixels in said two original images;
said two original images constituting each of two or more pairs of original images selected from three or more original images of the same subject, which become objects of comparison and reading; and

display-format setting means for causing said image display means to arrange, or switch in sequence, and display two or more interimage-processed images obtained by said interimage processing means, said interimage processing being performed on two or more pairs of original images.

27. (original): The image display unit as set forth in claim 26, further comprising registration means for aligning display positions of structurally characteristic parts of said subject in said two or more interimage-processed images.

28. (original): The image display unit as set forth in claim 26, further comprising registration means for registering display positions of structurally characteristic parts of said subject in said two or more interimage-processed images.

29. (original): The image display unit as set forth in claim 26, wherein said three or more original images were taken in sequence in a time series manner.

30. (original): The image display unit as set forth in claim 27, wherein said three or more original images were taken in sequence in a time series manner.

31. (original): The image display unit as set forth in claim 28, wherein said three or more original images were taken in sequence in a time series manner.

32. (original): The image display unit as set forth in claim 26, wherein one of said two original images is selected as a reference image so that each of said interimage-processed images is generated based on said reference image.

33. (original): The image display unit as set forth in claim 27, wherein one of said two original images is selected as a reference image so that each of said interimage-processed images is generated based on said reference image.

34. (original): The image display unit as set forth in claim 28, wherein one of said two original images is selected as a reference image so that each of said interimage-processed images is generated based on said reference image.

35. (original): The image display unit as set forth in claim 29, wherein one of said two original images is selected as a reference image so that each of said interimage-processed images is generated based on said reference image.

36. (original): The image display unit as set forth in claim 32, wherein said three or more original images were taken in sequence in a time series manner, and said selected one original image is the newest or oldest in a time series.

37. (original): The image display unit as set forth in claim 26, wherein each of said interimage-processed images is generated by performing said interimage processing on two of said three or more original images which are adjacent in a time series.

38-46. (canceled).

47. (original): The image display unit as set forth in claim 26, wherein said display-format setting means arranges, or switches in sequence, and displays said two or more interimage-processed images in the order that said original images on which said interimage-processed images are based were taken.

48. (original): The image display unit as set forth in claim 26, wherein said three or more images are medical radiation images.

49. (currently amended): The image display method as set forth in claim 1, wherein said ~~interimage processing is subtraction processes~~ are performed on two or more pairs of original images.

50. (previously presented): The image display method as set forth in claim 49, wherein one image of said two or more pairs of original images is common to all said pairs.

51. (previously presented): The image display unit as set forth in claim 26, wherein said interimage processing is performed on two or more pairs of original images.

52. (previously presented): The image display unit as set forth in claim 51, wherein one image of said two or more pairs of original images is common to all said pairs.

53. (currently amended): The image display method of claim 1, wherein the interimage processing is subtraction processes are automated.

54. (previously presented): The image display unit of claim 26, wherein the interimage processing is automated.

55. (currently amended): An image display method for comparing two or more interimage-processed images, comprising the steps of:

performing interimage processing on two original images to generate interimage-processed images, said interimage processing comprising at least one of the process of performing subtraction between corresponding pixels in said two original images, the process of registering positions of structural elements of said two original images, and the process of registering positions of structural elements of said two original images followed by the process of performing subtraction between corresponding pixels in said two original images;

said two original images constituting each of two or more pairs of original images selected from three or more original images taken of the same affected part of the same patient in a temporal series, which become objects of comparison and reading; and
arranging, or switching in sequence, and displaying two or more interimage-processed images generated by said interimage processing, that represents a change with the passage of time in the affected part, said interimage processing being performed on two or more pairs of original images.

56. (previously presented): The image display method as set forth in claim 55, wherein one of said two original images is selected as a reference image so that each of said interimage-processed images is generated based on said image.

57. (previously presented): The image display method as set forth in claim 56, wherein the reference image is the newest or oldest in the temporal series.

58. (currently amended): The image display method of claim 1, wherein at least one ~~interimage processed~~ subtraction image is an energy subtraction.

59. (previously presented): The image display unit of claim 26, wherein at least one interimage processed image is an energy subtraction.

60. (previously presented): The image display method of claim 55, wherein at least one interimage processed image is an energy subtraction.

61. (currently amended): The image display method of claim 1, wherein at least one ~~interimage processed~~subtraction image is a digital subtraction angiography.

62. (previously presented): The image display unit of claim 26, wherein at least one interimage processed image is a digital subtraction angiography.

63. (previously presented): The image display method of claim 55, wherein at least one interimage processed image is a digital subtraction angiography.

64. (new): The image display method of claim 1, wherein the subtraction processes administered on the two original images comprise dividing one or both of the original images into a plurality of regions of interest.

65. (new): The image display unit of claim 26, wherein the interimage processing on the two original images comprises dividing one or both of the original images into a plurality of regions of interest.

66. (new): The image display method of claim 55, wherein the interimage processing on the two original images comprises dividing one or both of the original images into a plurality of regions of interest.

67. (new): An image display method comprising the steps of:
administering subtraction processes on each of at least two types of pairs of images,
selected from three or more original images taken of the same subject; and
alternately switching and displaying at least two subtraction images, which are generated
by the subtraction processes and which become objects of comparison and reading, wherein:
the subtraction processes are performed by causing the positions of pixels that correspond
to structures within the images to be processed to match; and
the display is performed such that the display positions of corresponding structures within
each subtraction image are matched.